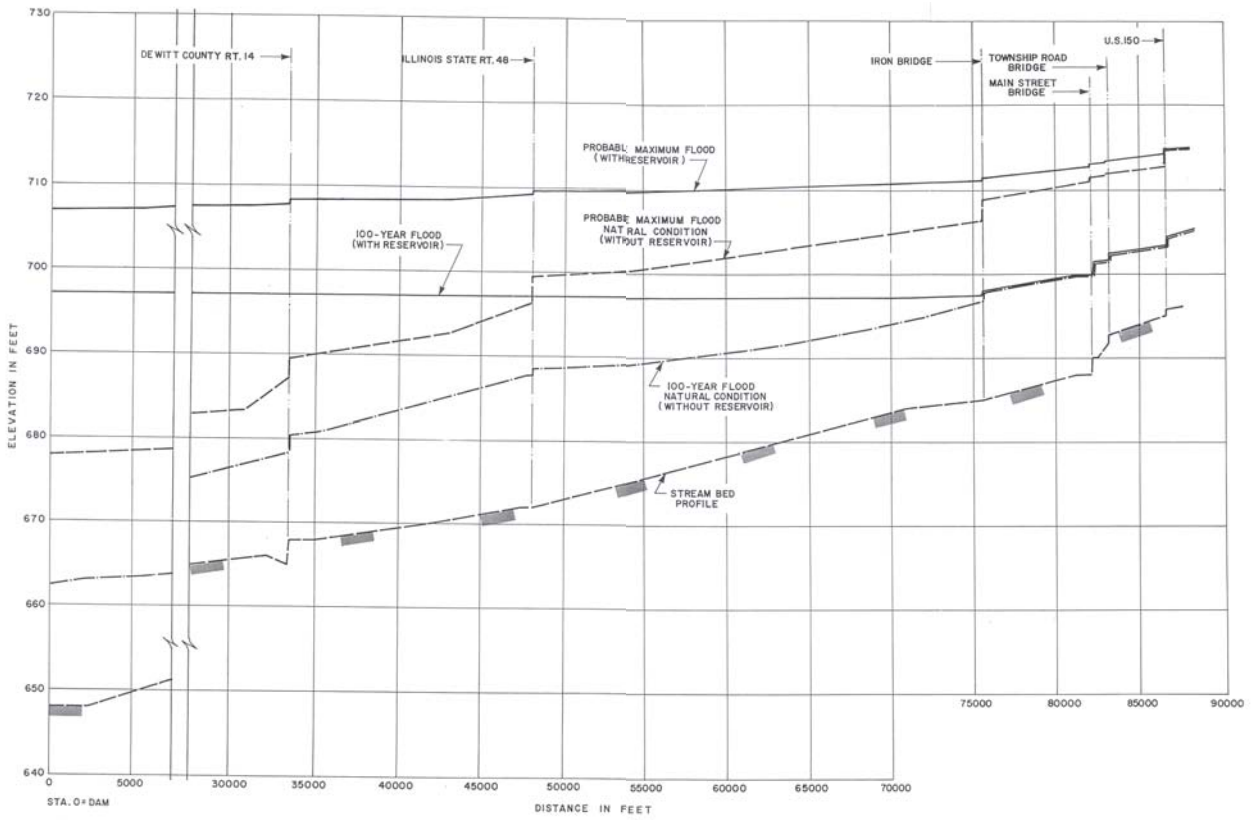


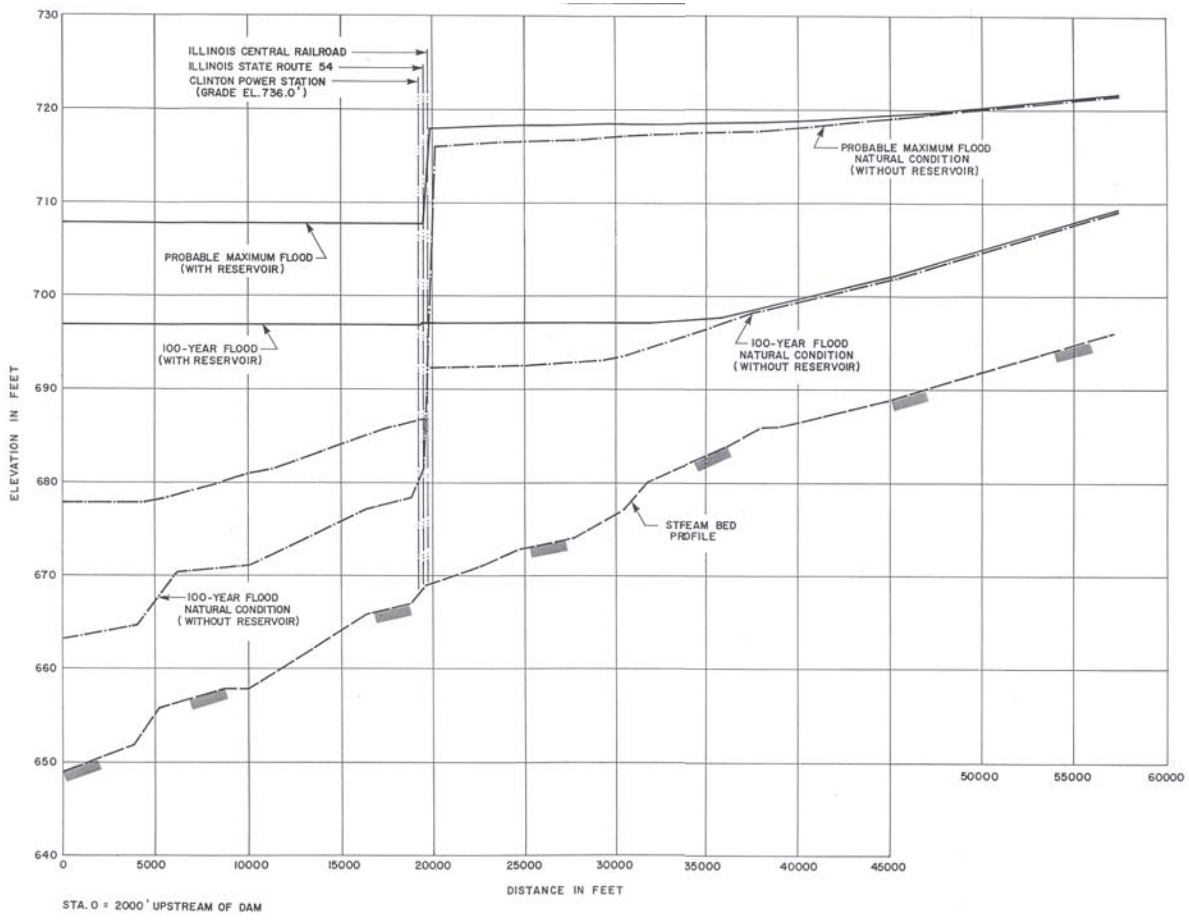
Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-7
Water Surface Profiles
Salt Creek

Legend

Data Source:
CPS, 1982

Not to Scale



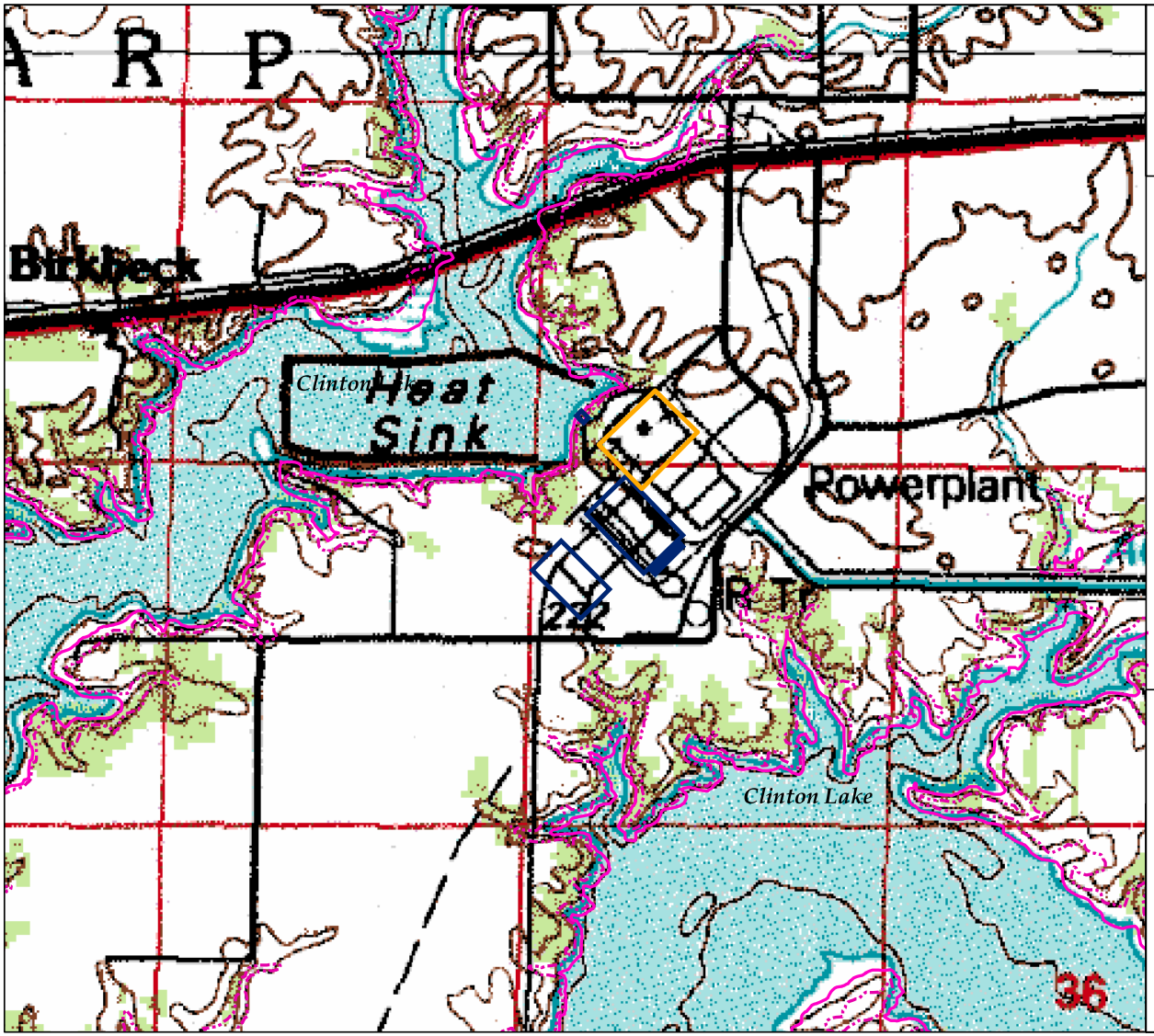
Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-8
Water Surface Profiles of North Fork Salt Creek

Legend

Data Source:
CPS, 1982

Not to Scale



Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-9
Flood Prone Area

Legend

- CPS Facility
- Proposed Areas for EGC ESP Facility Structures
- 100-year Flood Zone Boundary
- Probable Maximum Flood Zone Boundary (709.8 ft)

Note: The Probable Maximum Flood Zone Boundary and the 100-year Flood Zone Boundary were derived form USGS National Digital Elevation Model Data. The Probable Maximum Flood Elevation is 709.8 ft (216m). The100-year flood is 697 ft (212m). Variations in mapping accuracy between the map base and the flood boundaries derived from the USGS Digital Elevation Model are apparent in locations on the map.

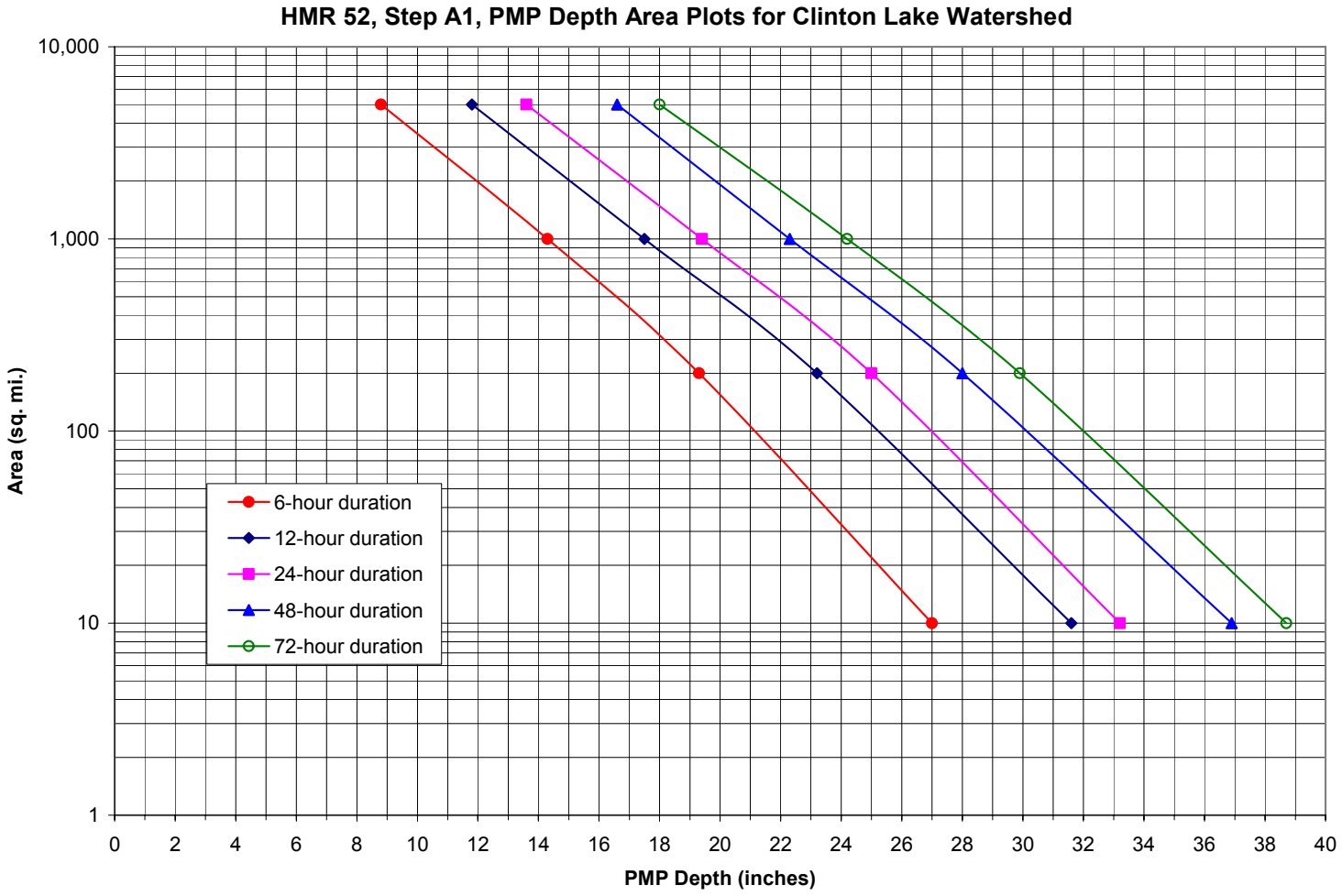
Data Sources:
USGS, 1984 and 1989
USGS, 1999
ISWS, 1996
CPS, 2002

N

Feet
0 1,000 2,000 4,000

FIGURE 2.4-10a

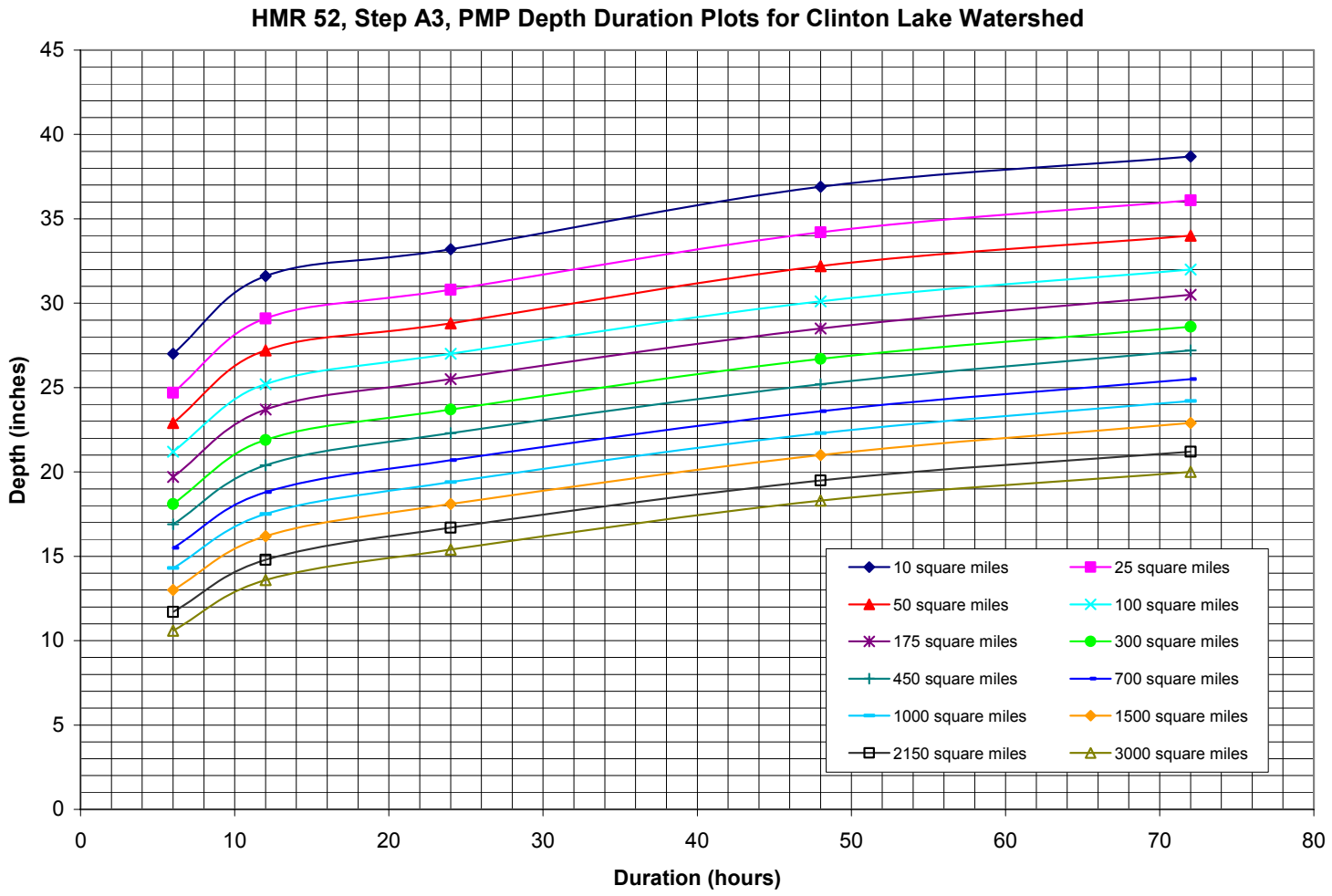
PMP Depth-Area-Duration Plot for Clinton Lake Watershed



Site Safety Analysis Report for the EGC Early Site Permit

FIGURE 2.4-10b

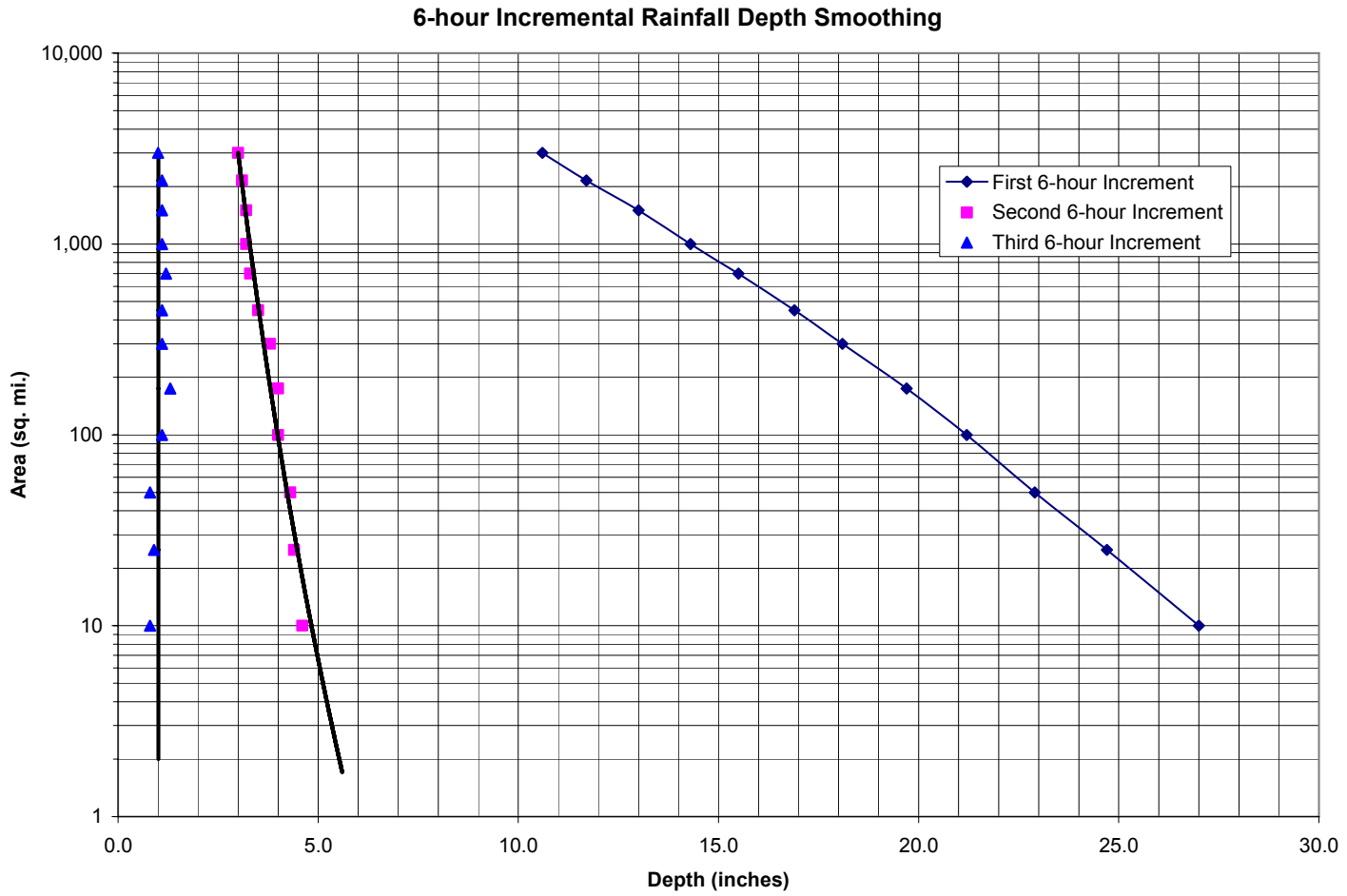
PMP Depth-Area-Duration Plot for Clinton Lake Watershed



Site Safety Analysis Report for the EGC Early Site Permit

FIGURE 2.4-10c

Six-Hour Incremental Rainfall Depth Smoothing



Site Safety Analysis Report for the EGC Early Site Permit

FIGURE 2.4-11

SCS Curve Number Based Infiltration and Constant Infiltration Rate

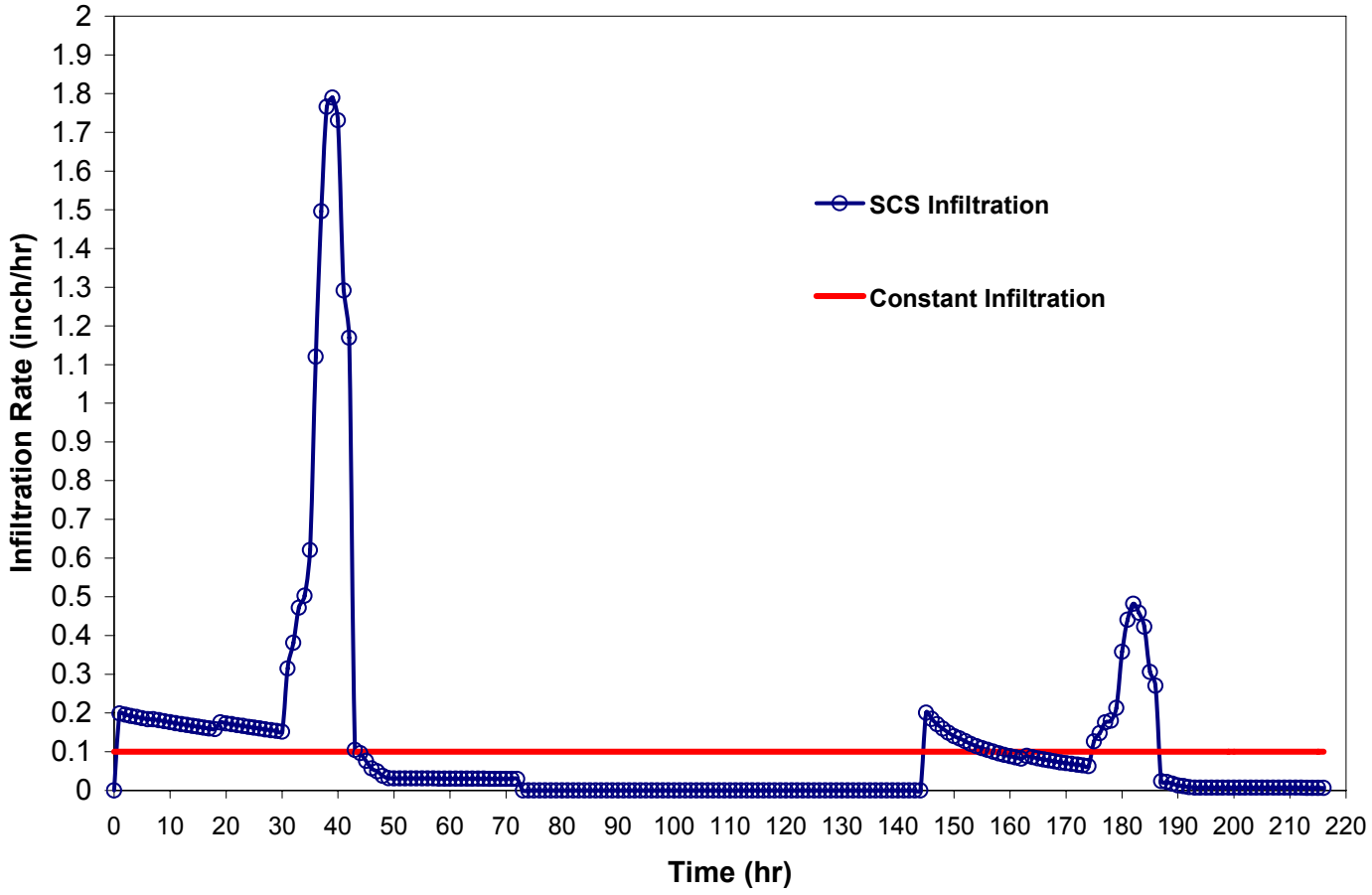


FIGURE 2.4-12

Two-Basin + Lake Model Schematic

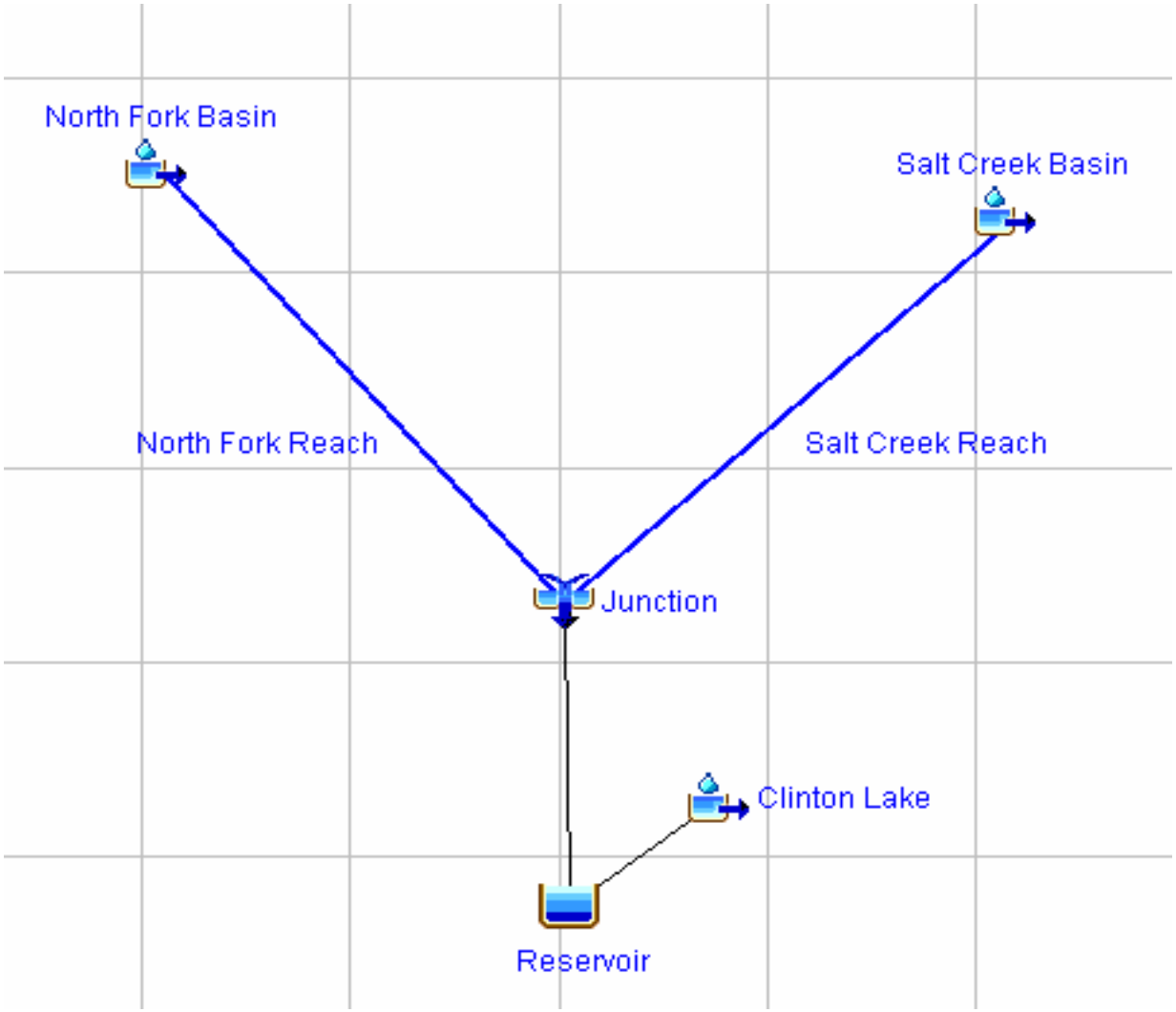
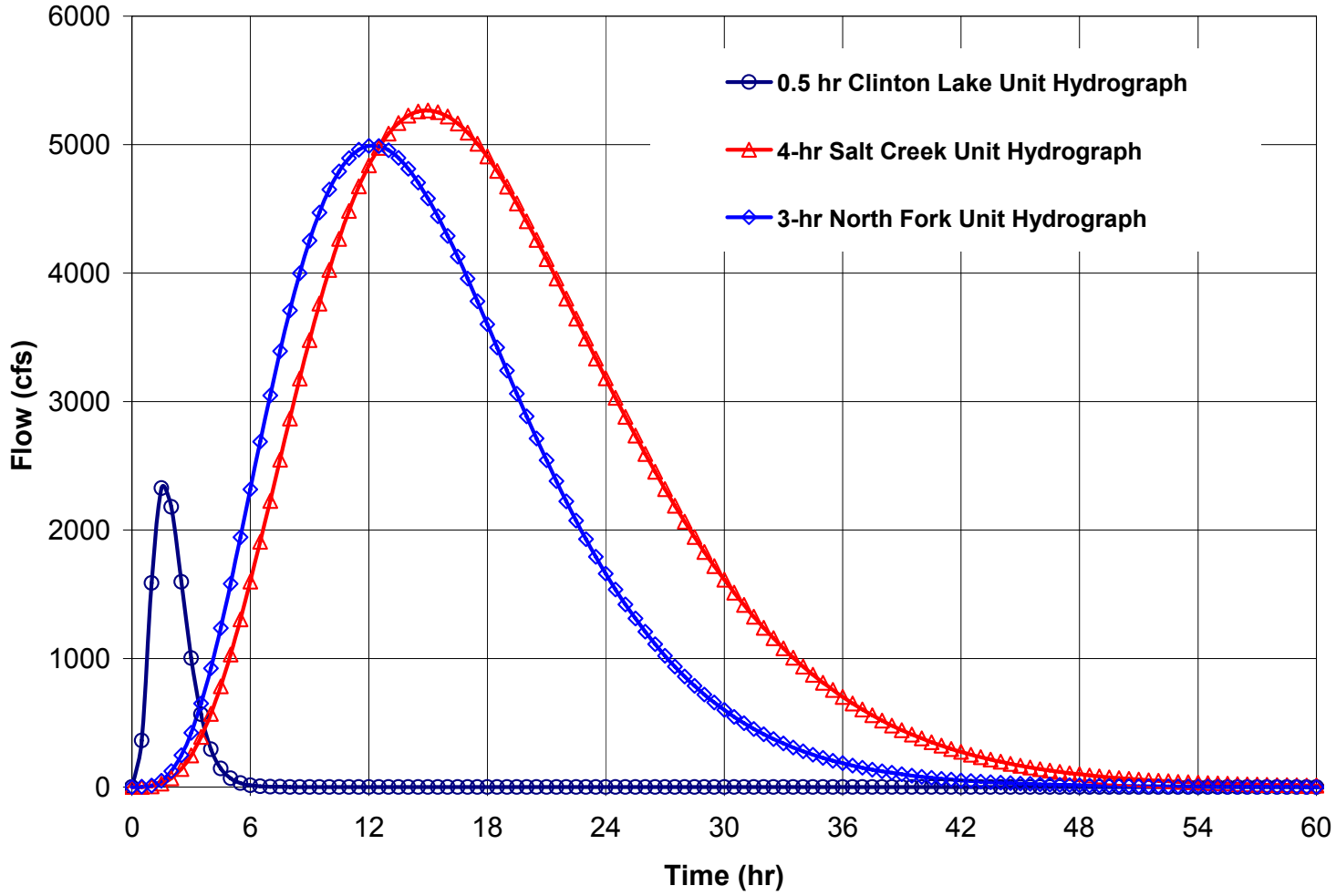


FIGURE 2.4-13

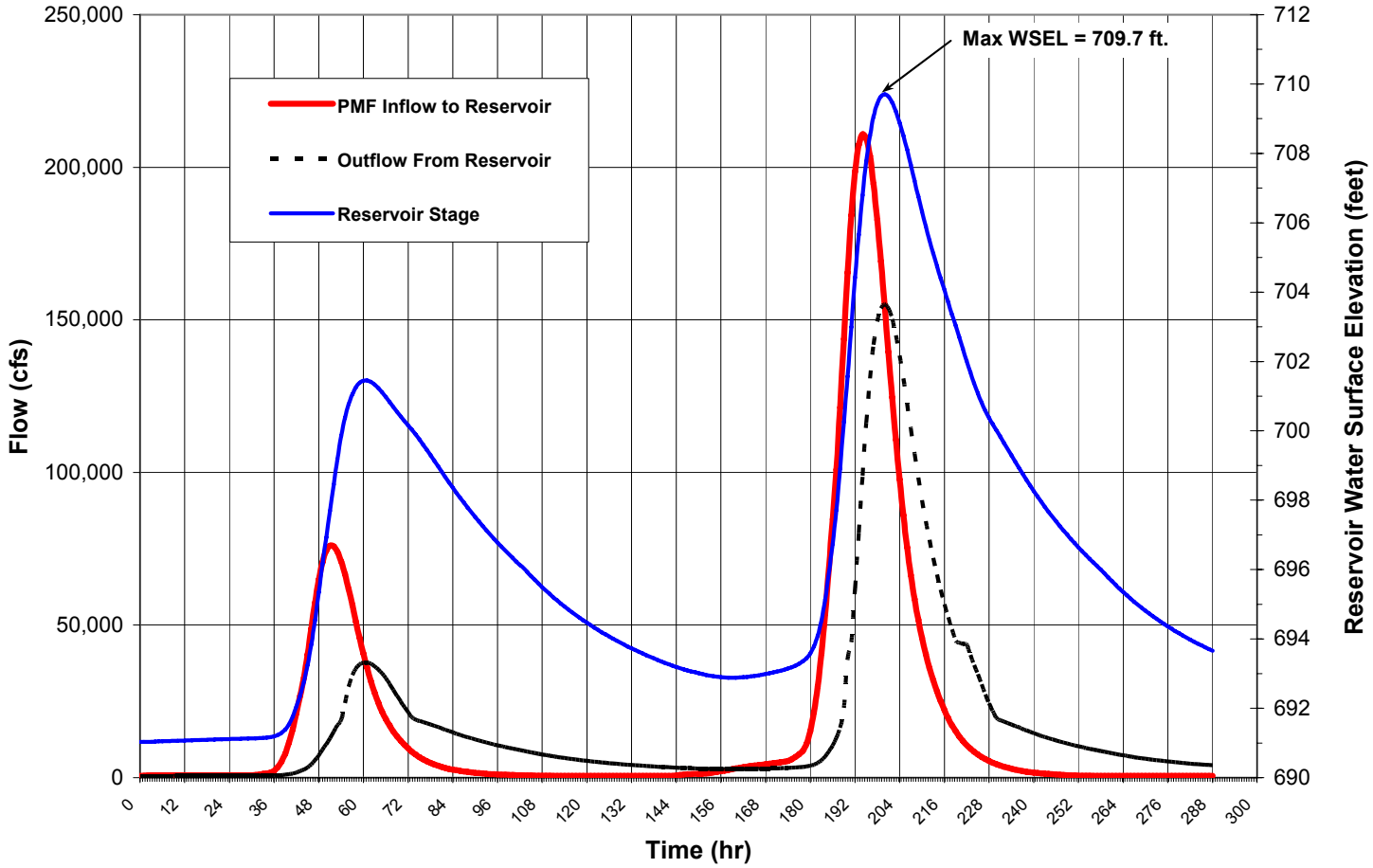
Unit Hydrographs for Salt Creek, North Fork, and Clinton Lake Watersheds



Site Safety Analysis Report for the EGC Early Site Permit

FIGURE 2.4-14a

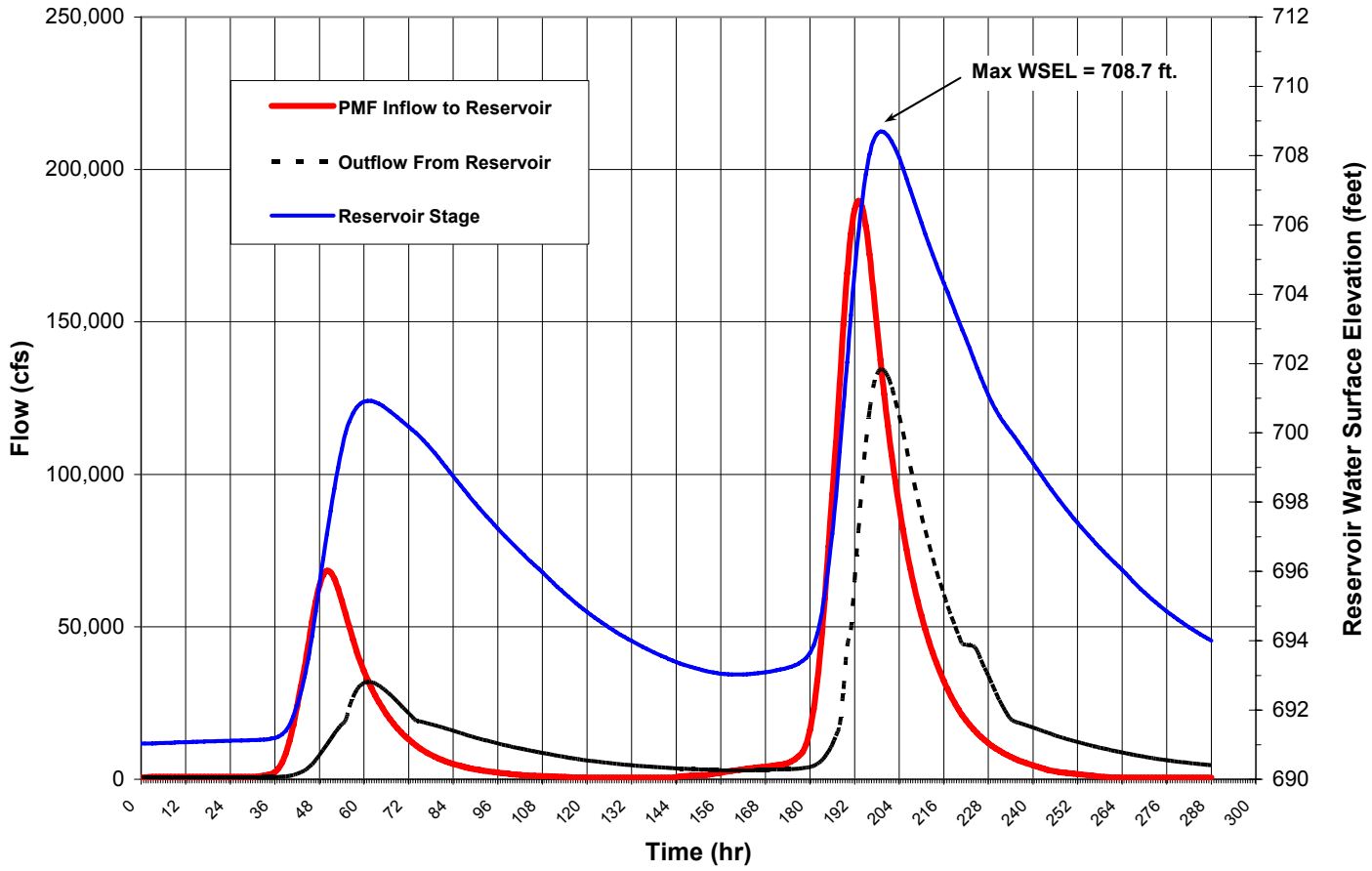
HEC-HMS Results Using SCS Hydrograph Method for Two-Basin Model



Site Safety Analysis Report for the EGC Early Site Permit

FIGURE 2.4-14b

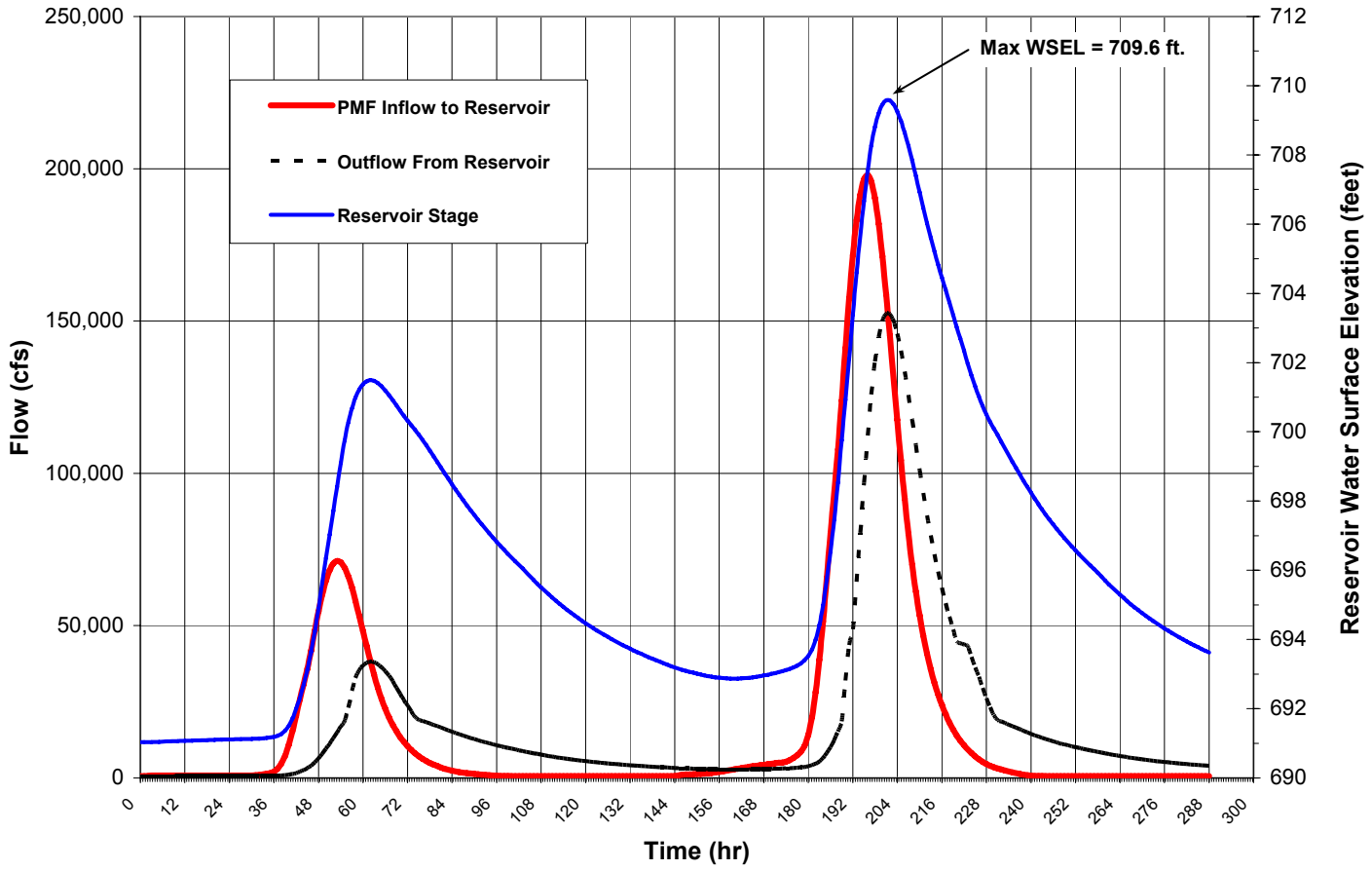
HEC-HMS Results Using Snyder's Hydrograph Method with Peaking Factor 0.6 for Two-Basin Model



Site Safety Analysis Report for the EGC Early Site Permit

FIGURE 2.4-14c

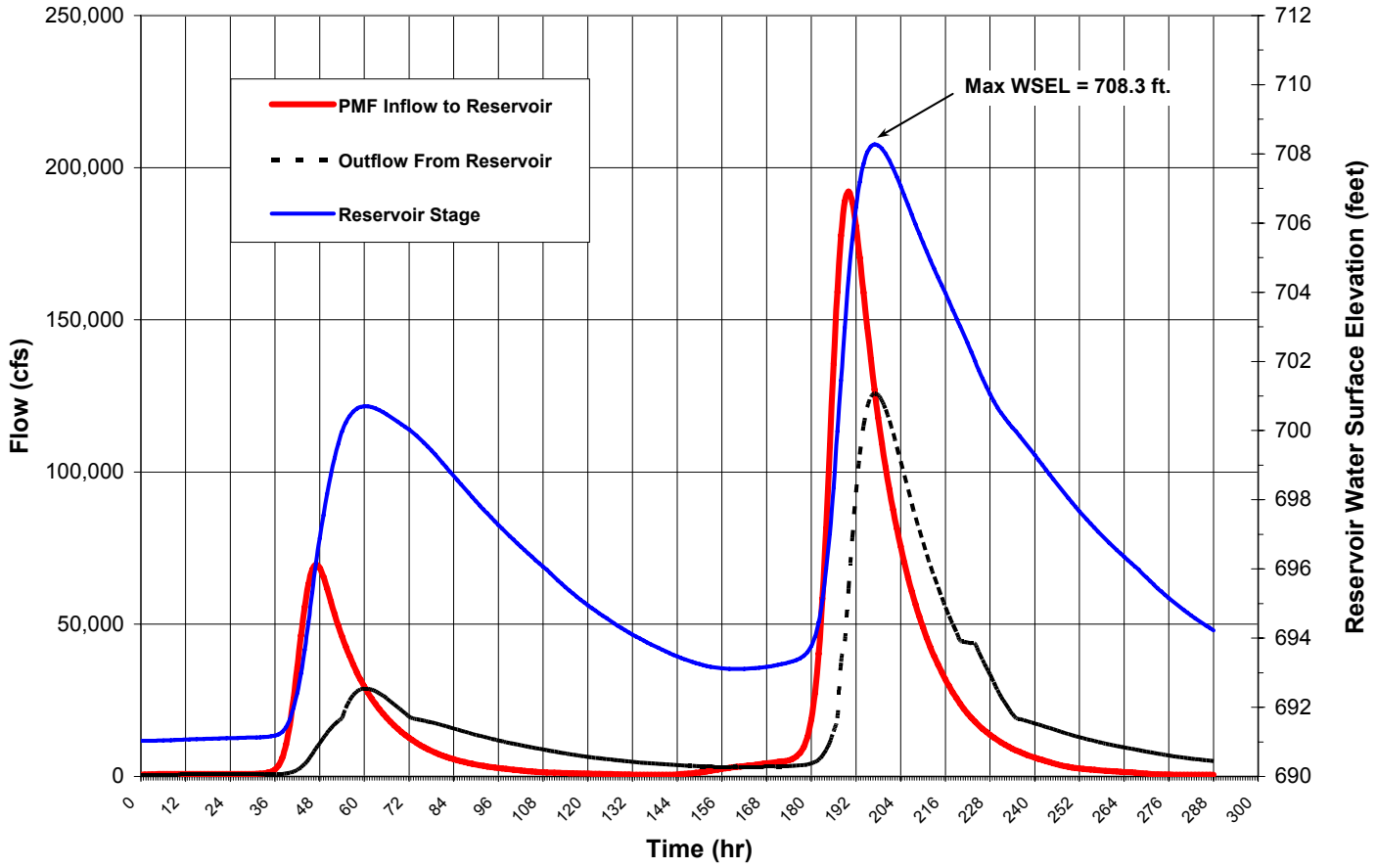
HEC-HMS Results Using Snyder's Hydrograph Method with Peaking Factor 0.8 for Two-Basin Model

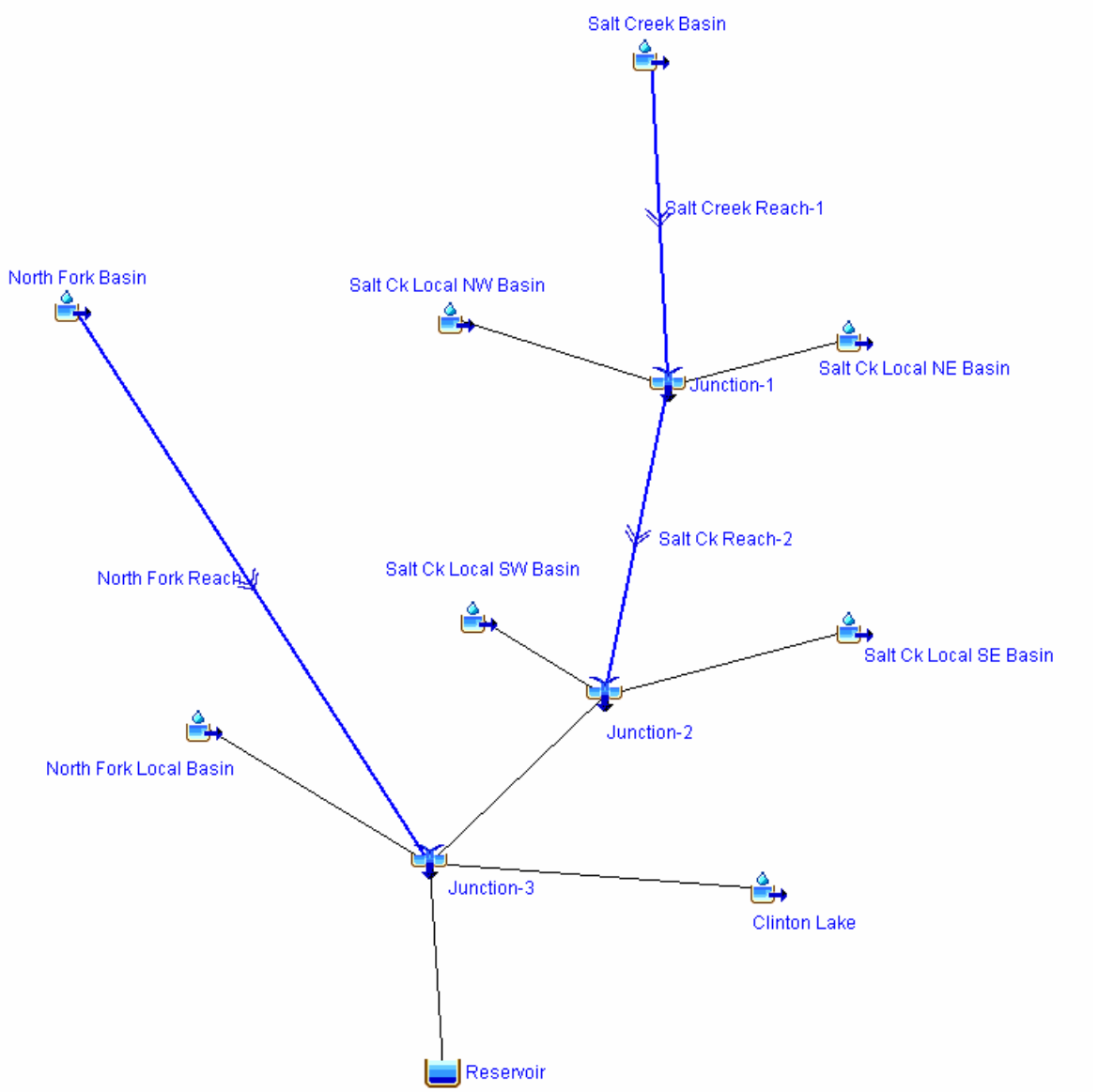


Site Safety Analysis Report for the EGC Early Site Permit

FIGURE 2.4-14d

HEC-HMS Results Using Snyder's Hydrograph Method with Peaking Factor 0.4 for Two-Basin Model

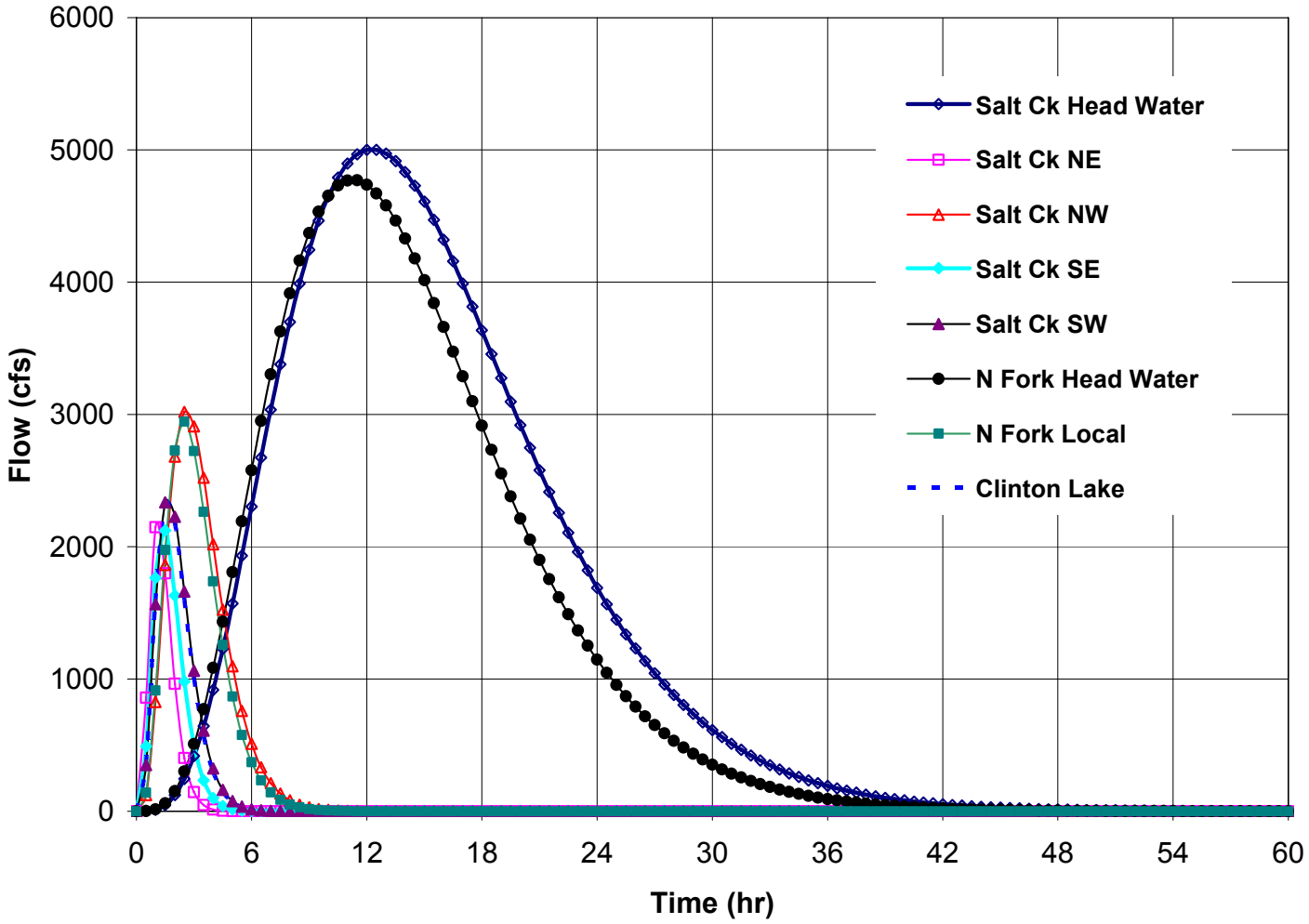




Site Safety Analysis Report for the EGC Early Site Permit

FIGURE 2.4-15

Seven-Basin + Lake Model Schematic



Site Safety Analysis Report for the EGC Early Site Permit

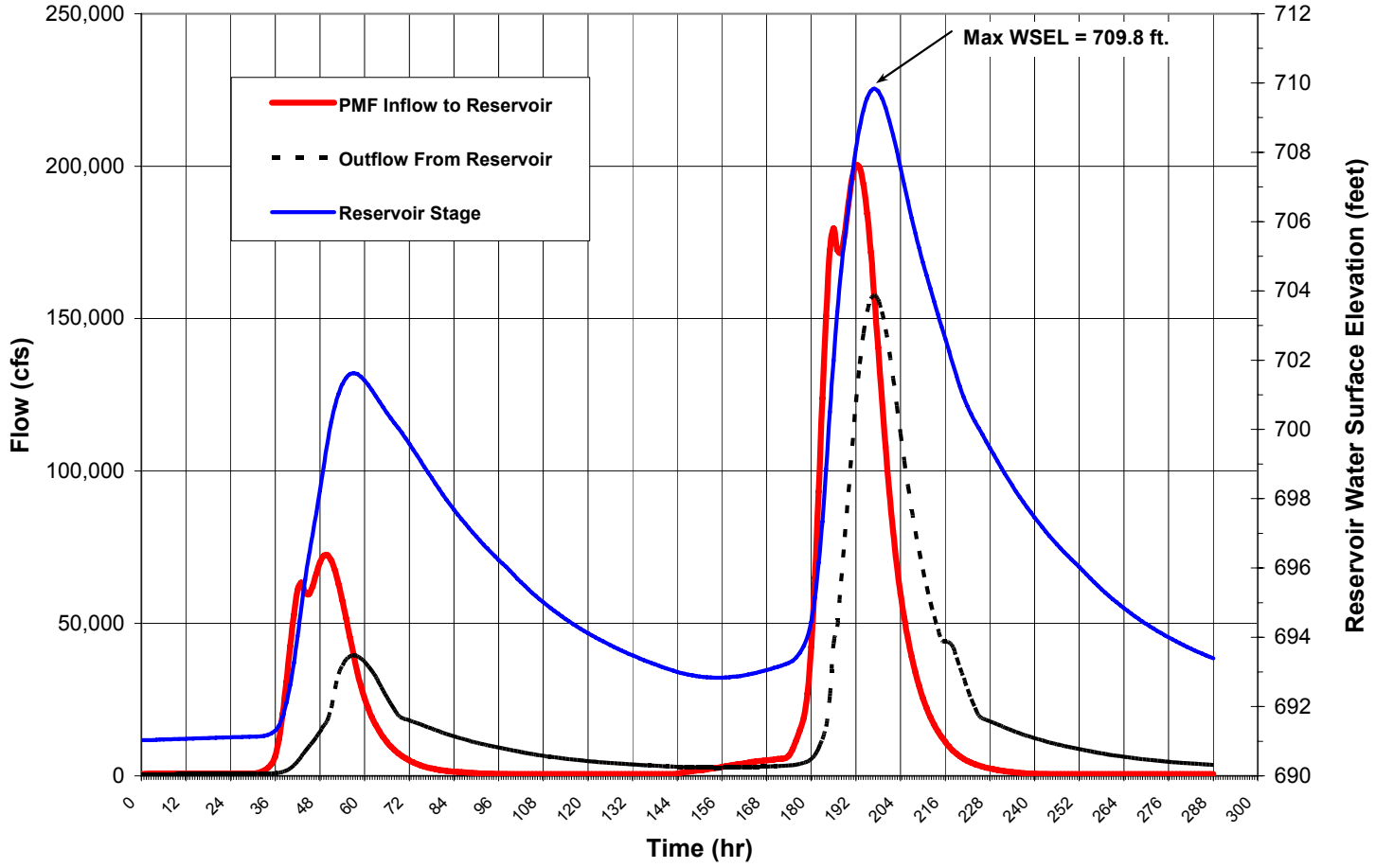
FIGURE 2.4-16

Unit Hydrographs for Salt Creek, North Fork, and Clinton Lake Watersheds

Site Safety Analysis Report for the EGC Early Site Permit

FIGURE 2.4-17a

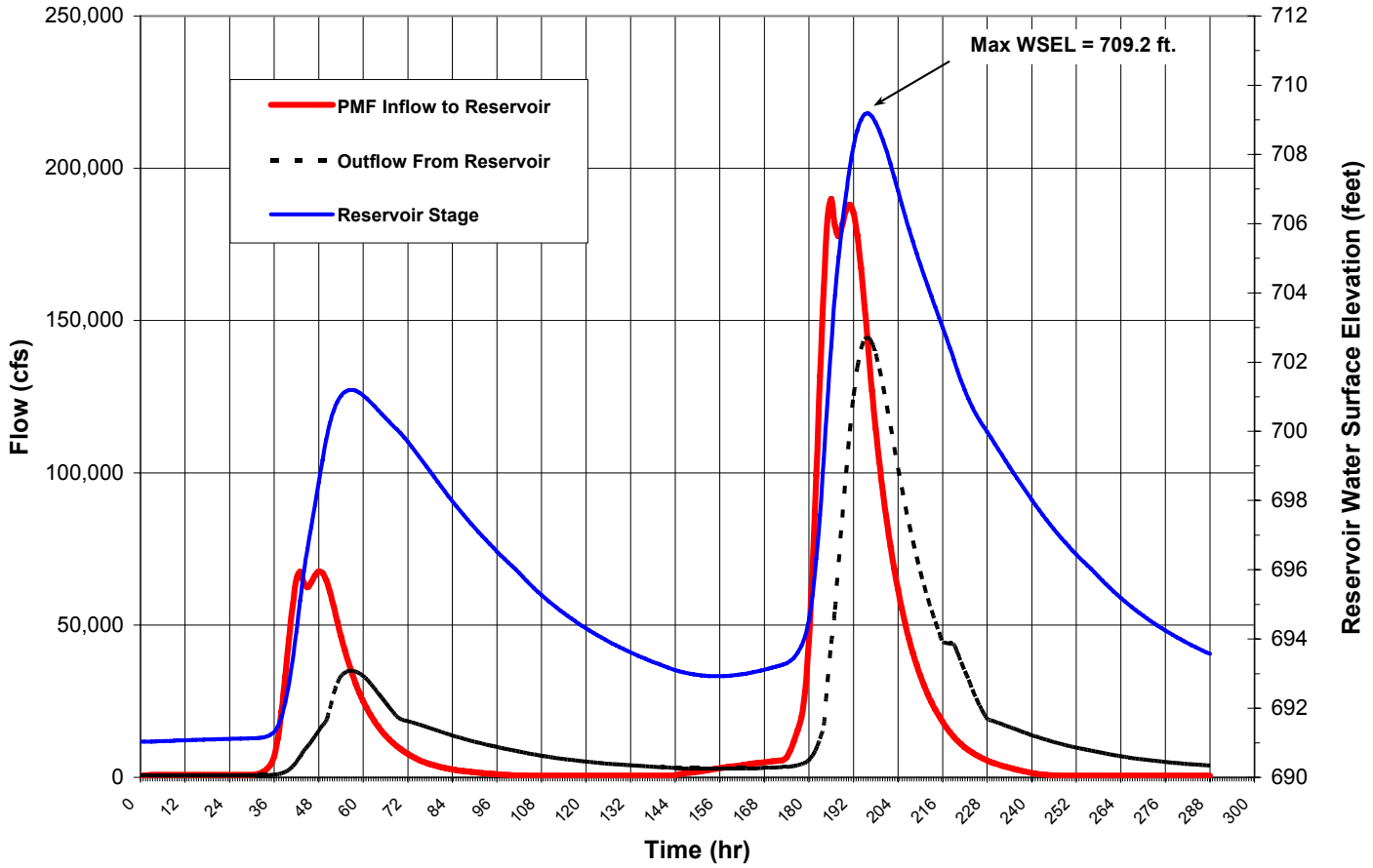
HEC-HMS Results Using SCS Hydrograph Method for Seven-Basin Model



Site Safety Analysis Report for the EGC Early Site Permit

FIGURE 2.4-17b

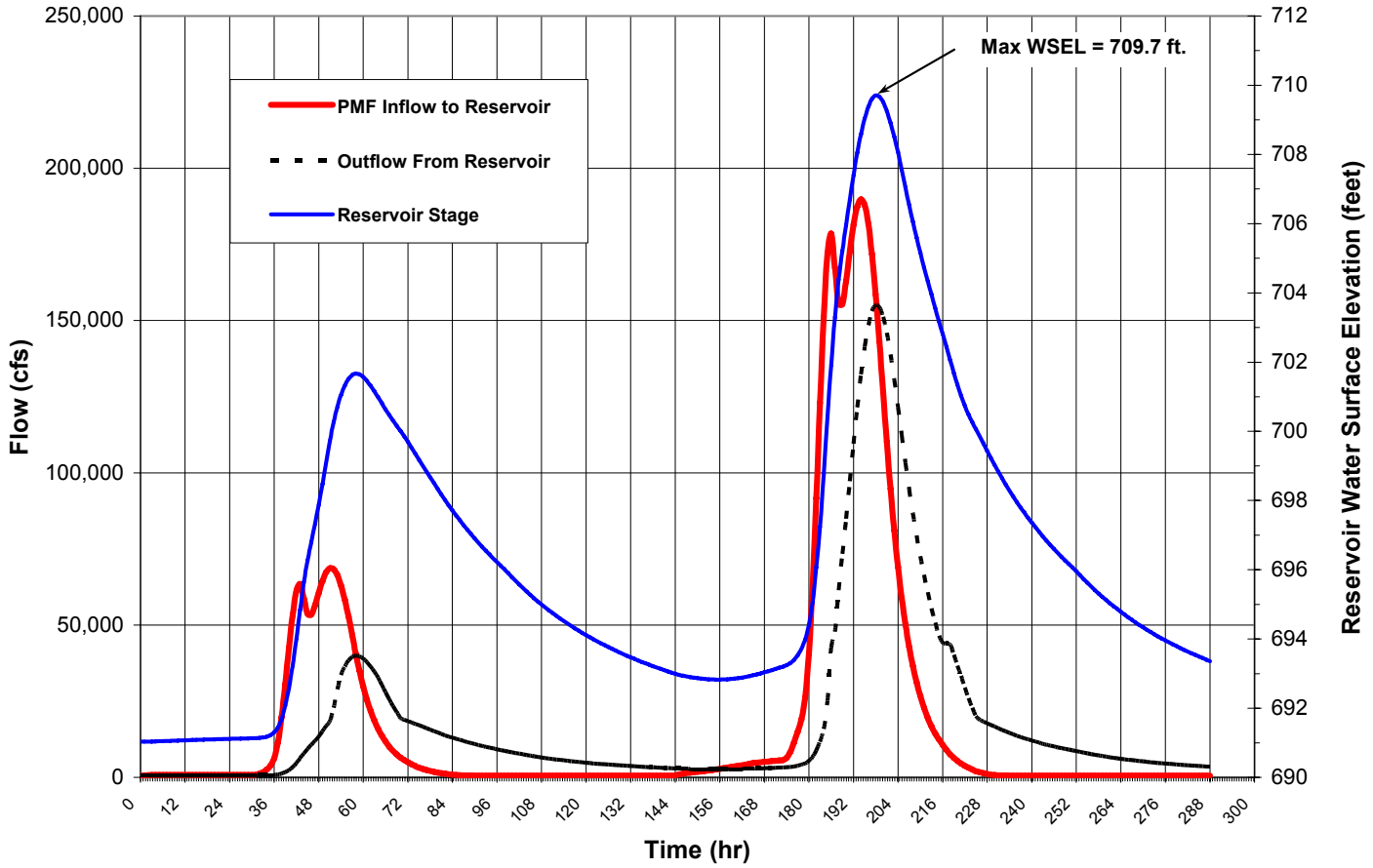
HEC-HMS Results Using Snyder's Hydrograph Method with Peaking Factor 0.6 for Seven-Basin Model



Site Safety Analysis Report for the EGC Early Site Permit

FIGURE 2.4-17c

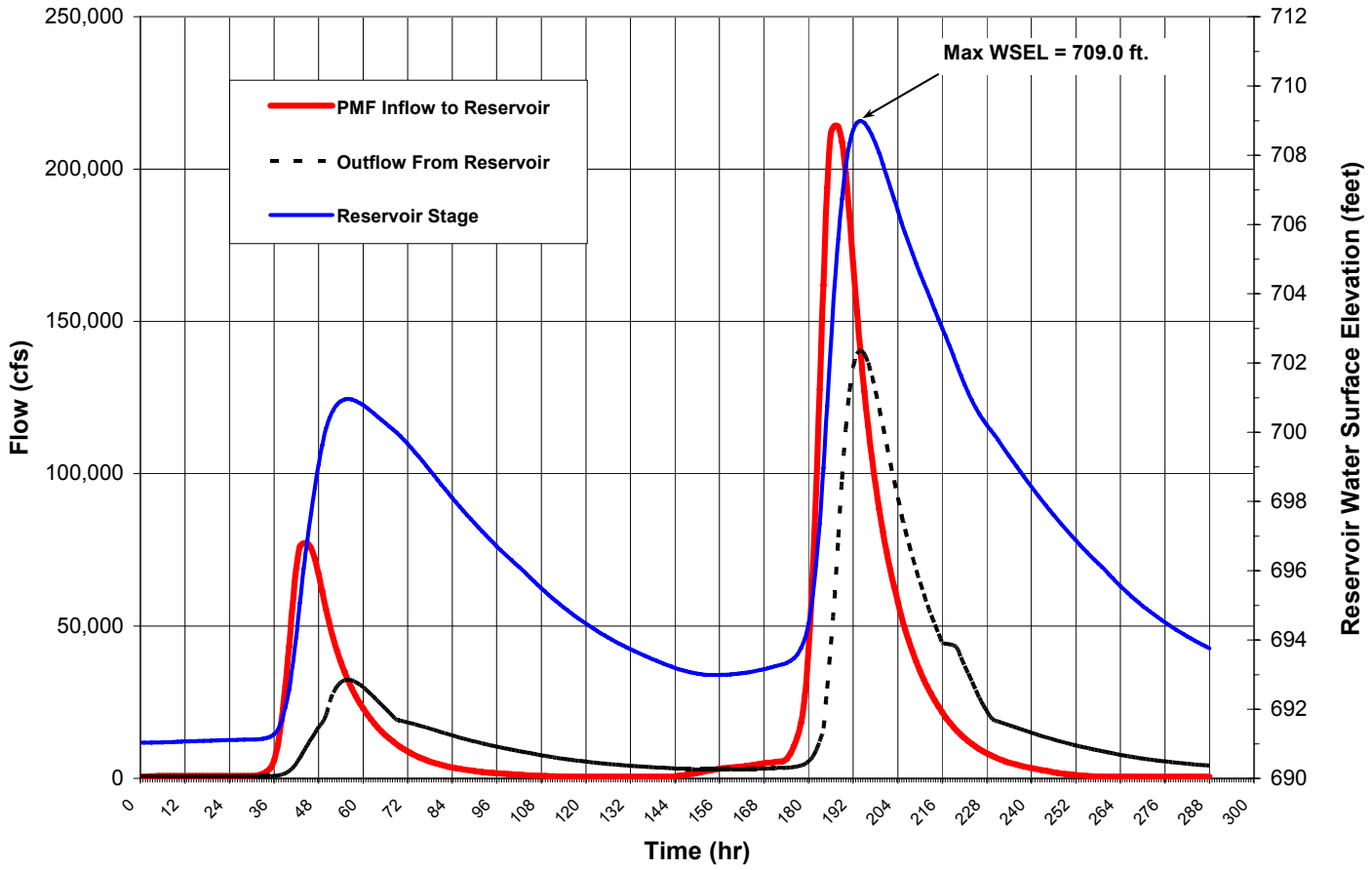
HEC-HMS Results Using Snyder's Hydrograph Method with Peaking Factor 0.8 for Seven-Basin Model



Site Safety Analysis Report for the EGC Early Site Permit

FIGURE 2.4-17d

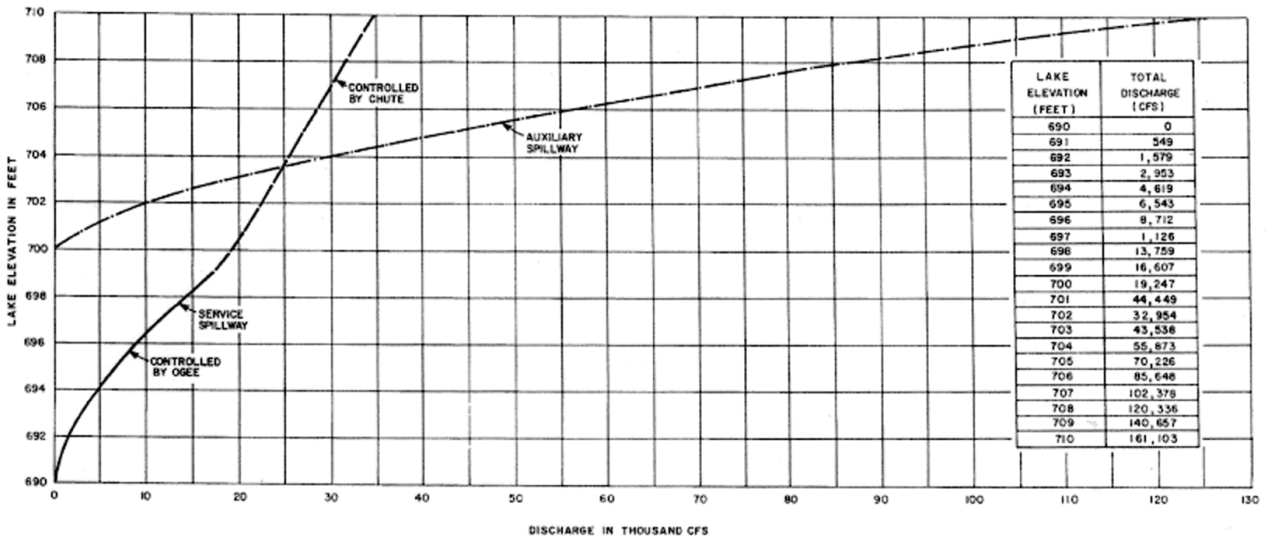
HEC-HMS Results Using Snyder's Hydrograph Method with Peaking Factor 0.4 for Seven-Basin Model



Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-18

Spillway Rating Curves

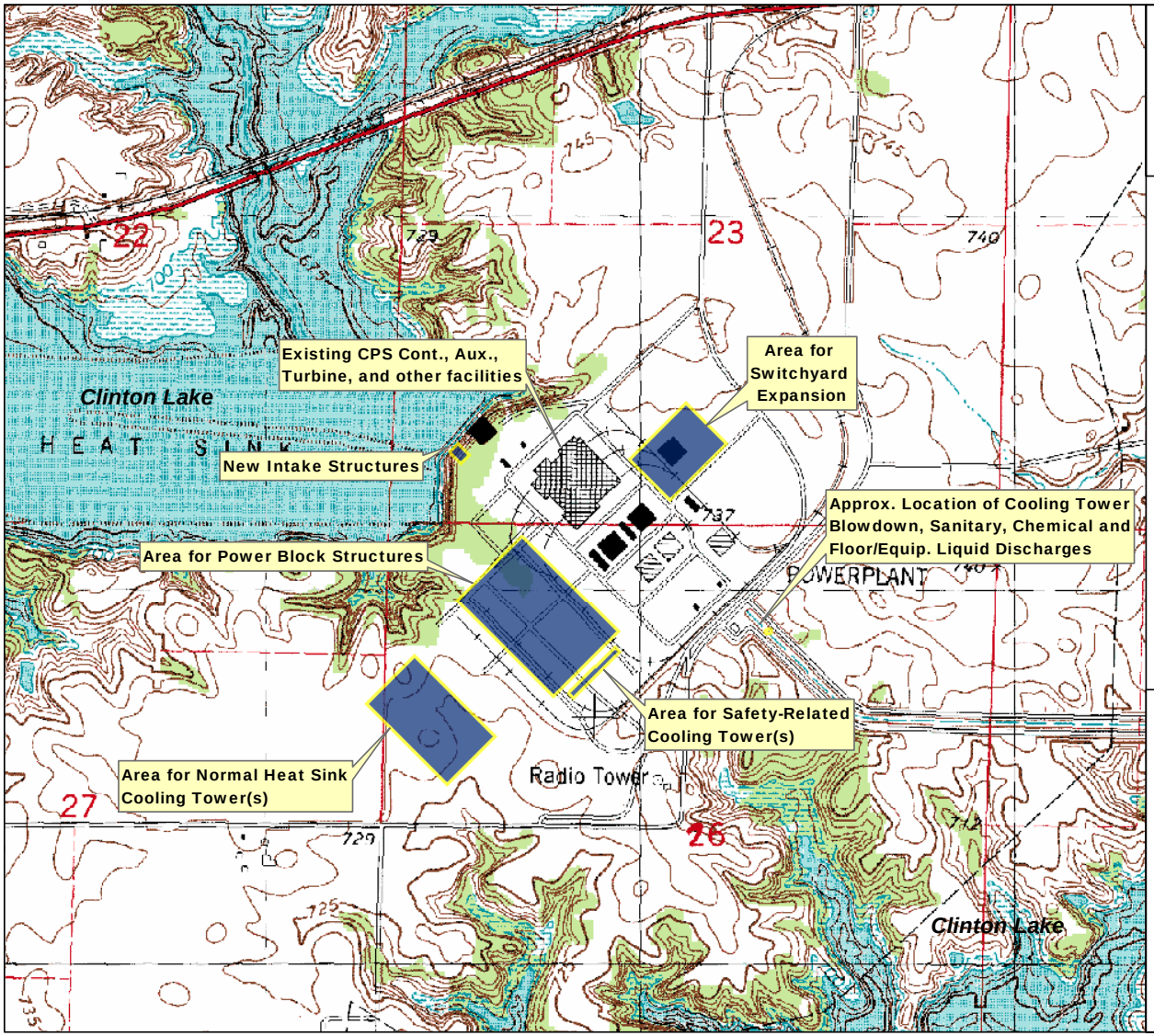


LAKE ELEVATION (FEET)	TOTAL DISCHARGE (CFS)
690	0
691	549
692	1,579
693	2,953
694	4,619
695	6,543
696	8,712
697	11,126
698	13,759
699	16,607
700	19,247
701	44,449
702	32,954
703	43,538
704	55,873
705	70,226
706	85,648
707	102,378
708	120,336
709	140,657
710	161,103

Legend

Data Source
CPS, 2002

Not to Scale



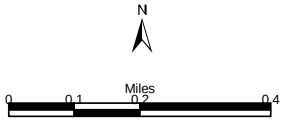
Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-19
Proposed Areas for EGC ESP Structures

Legend

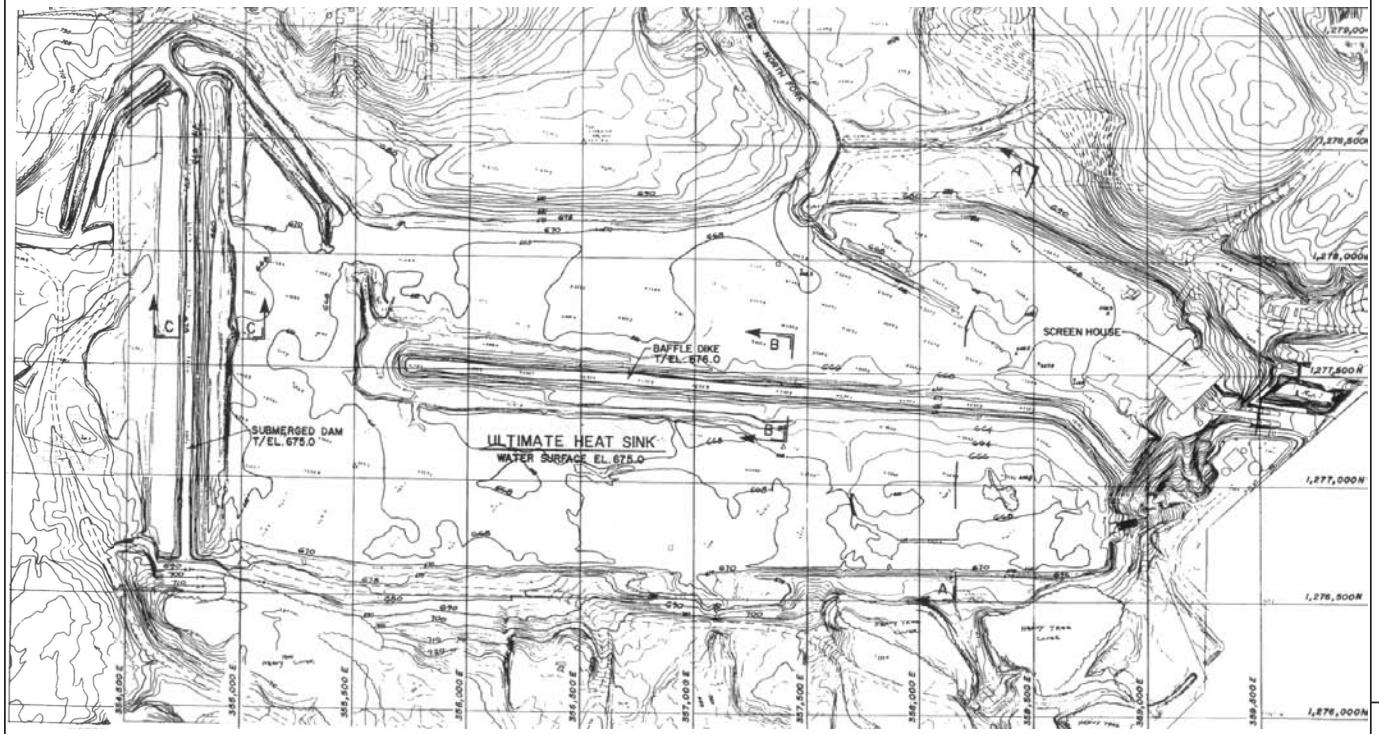
Proposed Areas for EGC ESP Facility Structures

Data Sources:
USGS, 1979



Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.4-20
CPS Ultimate Heat Sink Plan



Legend

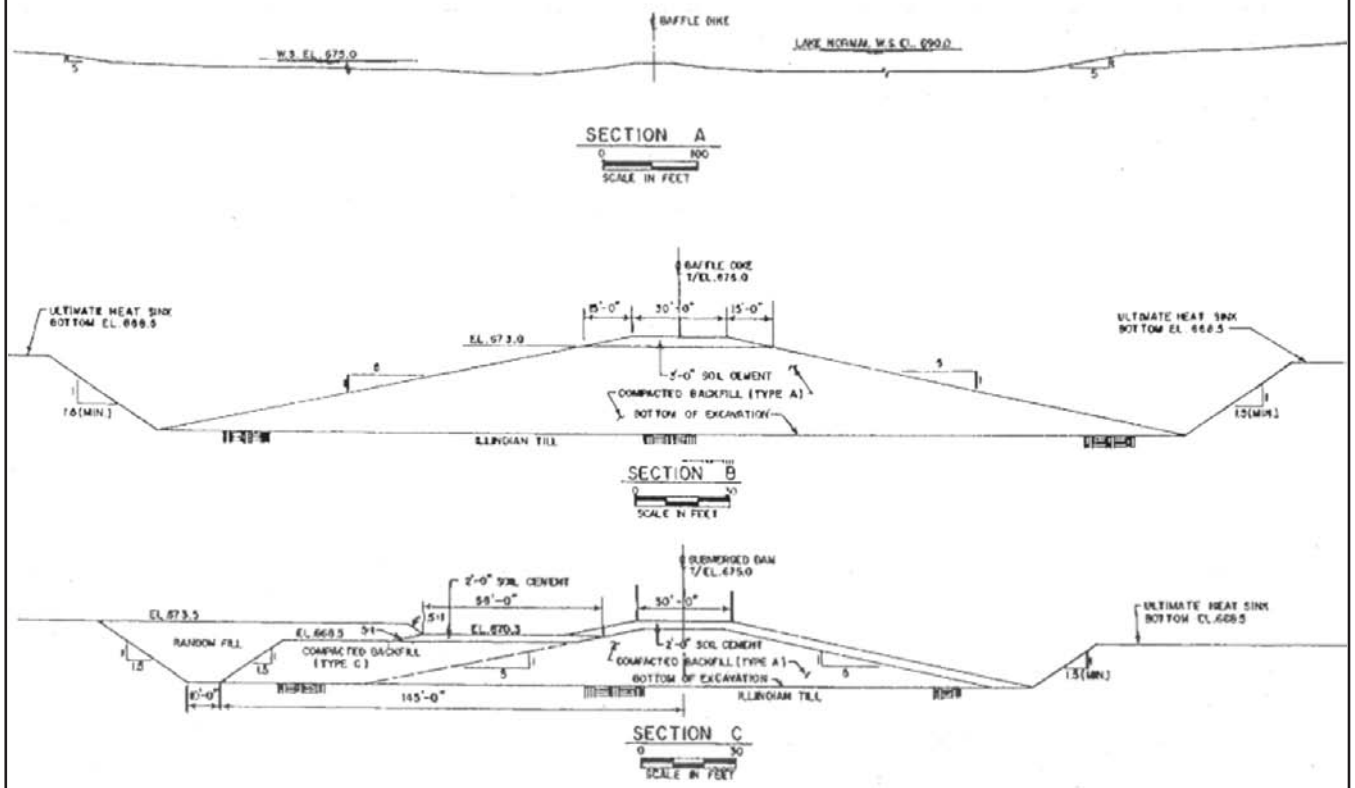
NOTES:
1. Topographic map of ultimate heat sink after construction (Oct. 17, 1977).
2. Refer to Figure 2.4-15 for sections.

Data Source:
CPS, 2002

Not to Scale

Figure 2.4-21

CPS Ultimate Heat Sink Sections



Legend

NOTES:

1. Refer to Figure 2.4-14 for sections.

Data Source:
CPS, 2002

Not to Scale